

```
#include <stdio.h>

struct p{
    int id1;
    char name;
    int id2;
    char c;
    float percentage;
};

struct pChange{
    int id1;
    int id2;
    float percentage;
    char name;
    char c;
};

struct q{
    char first[10];
    char middle_initial;
    char last[10];
    double salary;
    int numinhousehold;
};

struct qChange
{
    int numinhousehold;
    char first[10];
    char last[10];
    char middle_initial;
    double salary;
};

struct r{
    char b;
    int a[2];
    int i;
    char c;
    int *p;
};

struct rChange
{
    int a[2];
    int *p;
    int i;
    char c;
};
```

```
    char b;
};

struct linked{
    int d;
    struct linked *next;
    struct linked *prev;
    char c;
};

struct linkedChange
{
    struct linked *next;
    struct linked *prev;
    int d;
    char c;
};

struct mat{
    int a[4][3];
    char b[10];
    double d;
    int c[3][3];
};

struct matChange
{
    double d;
    int c[3][3];
    int a[4][3];
    char b[10];
};

int main()
{
    printf("%d for struct p\n",sizeof(struct p));
    printf ("%d for Changed p\n\n",sizeof(struct pChange));

    printf("%d for struct q\n",sizeof(struct q));
    printf("%d for Changed q\n\n",sizeof(struct qChange));

    printf("%d for struct r\n",sizeof(struct r));
    printf("%d for changed r\n\n",sizeof(struct rChange));

    printf("%d for struct linked\n",sizeof(struct linked));
    printf("%d for Changed linked\n\n",sizeof(struct linkedChange));

    printf("%d for struct mat\n",sizeof(struct mat));
    printf("%d for Changed mat\n\n",sizeof(struct matChange));

    /*
    Out put

    bertvm:~/cs261/lab4> ./a.out
```

```
    20 for struct p
    16 for Changed p

    40 for struct q
    40 for Changed q

    32 for struct r
    24 for changed r

    32 for struct linked
    24 for Changed linked

    112 for struct mat
    104 for Changed mat

    */
return 0;
}
```